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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/067,539	02/07/2002	Naoharu Yanagawa	PU01-01165	7834
21254	7590	03/28/2005	EXAMINER	
MCGINN & GIBB, PLLC 8321 OLD COURTHOUSE ROAD SUITE 200 VIENNA, VA 22182-3817			PATEL, GAUTAM	
			ART UNIT	PAPER NUMBER
			2655	

DATE MAILED: 03/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Supplemental.
Office Action Summary

Application No.

10/067,539

Applicant(s)

YANAGAWA ET AL.

Examiner

Gautam R. Patel

Art Unit

2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,9,10,16,17,25 and 27 is/are rejected.
- 7) ☒ Claim(s) 2-8, 11-15, 18-24, 26 and 28-29 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Supplemental Response to Amendment

1. This is second response to amendment filed on 11-24-04. Inadvertently few claims [26-29] were left out during first action. This action covers claims 26-29, missing from first action
2. claims 1-29 remain for examination. Claims 26-29 are newly added for examination.
3. Applicant's arguments regarding rejection of claims 4-8 and 20-24 under 35 U.S.C. § 112 second paragraph have been fully considered and rejection of claims 4-8 and 20-24 under 35 U.S.C. 112 second paragraph has been **withdrawn**.

OBJECTION to CLAIMS

4. claims 3-8 and 19-24 are objected.
Claim 3 discloses "a reference signal" on line 3. It is not clear how this signal is different from the reference signal already defined in claim 1.

Claim 19 has the same problem.

NOTE: For examination purposes both signal are considered as same.

Correction or explanation is required.

Claim Rejections - 35 U.S.C. § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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Claims 1, 9-10, 16-17, 25 and 27 are rejected under 35 U.S.C. § 102(b) as being anticipated by Rees et al., US. patent 4,998,234 (hereafter Rees).

As to claim 1, Rees discloses the invention as claimed [see Figs. 4-7, especially 4-5] including an optical pickup, adjusting means, and synthesizing means, comprising:

an optical pickup [fig. 4] having a plurality of light receiving planes for receiving a light beam returning from an optical disc when a reading beam of light is radiated to the optical disc, and for producing a plurality of signals [col. 5, lines 31-43 & col. 6, lines 3-16];

adjusting means [fig. 5, units 120, 122, 124, 126, 116 & 118] for adjusting signal levels of the plurality of signals such that each of the signal levels of the plurality of signals becomes equal to a reference level determined from at least one of the signal levels of the plurality of signals [col. 6, lines 3-59]; and

synthesizing means [fig. 5, units 128, 130, 132 & 134] for synthesizing the plurality of signals after the signal levels of the plurality of signals are adjusted by the adjusting means to obtain a synthesized [signal LOG AD/BC] signal [col. 6, line 3 to col. 7, line 2].

6. The aforementioned claim 9, recites the following elements, inter alia, disclosed in Rees: the reference level is an average of signal levels of at least two of the plurality of signals [col. 6, lines 33-52].

7. As to claims 10 and 17, they are method claims corresponding to claim 1 and they are therefore rejected for the similar reasons set forth in the rejection of claim 1, supra.

8. As to claims 16 and 25, they are method claims corresponding to claim 9 and they are therefore rejected for the similar reasons set forth in the rejection of claim 9, supra.

9. The aforementioned claim 27, recites the following elements, inter alia, disclosed in Rees:

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a plurality of variable gain amplifiers [fig. 5, units 90, 92, 94 96] for amplifying the others of the plurality of signals with gains determined in accordance with respective control signals,

a plurality of peak detection circuits for utilizing peak levels of output signals of the plurality of variable gain amplifiers as the subordinate level signals respectively; and

a plurality of difference signal producing circuits for creating difference signals representing level differences between the reference level signal and the subordinate level signals respectively and utilizing the4 difference signals as the respective control signals [col. 6, line 3 to col. 7, line 2].

Allowable Subject Matter

10. Claims 2-8, 11-15, 18-24 26, and 28-29 are objected as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Subject to correcting or explaining the "Objection to Claims in paragraph 4 above [which was not addressed in the present amendment".

NOTE: Claims 2-8, 11-15 and 18-24 are allowable over the prior art of record since the cited references taken individually or in combination fails to particularly disclose a signal synthesizing apparatus which includes an adjusting means which includes a relay circuit which includes "selecting a reference level which comprises a signal level of one of the plurality of signals and comparing this reference signal to other signals and produce an output". It is noted that the closest prior art, Rees shows a similar apparatus, which has all of the above circuits including relay circuit. Also selecting a reference signal from one of plurality of signals and compare it to other similar signals is known [see Yamashita et al.; US patent 6,172,560, especially col. 18, lines 40-50]. However Rees fails to disclose selecting a reference level, which comprises a signal level of one of the plurality of signals and comparing this reference signal to other signals and produce an output. And Yamashita does not discloses that reference signal is produced and compared within the optical pickup level adjusting and synthesizing environment.

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11. Applicant's arguments filed on 11-24-04 have been fully considered but they are not deemed to be persuasive for the following reasons.

In the REMARKS, the Applicant argues as follows:

A) That: "Rees does not disclose or suggest any structure, equivalents thereof, or identify of function necessary for the claimed "adjusting means"

.... "adjusting means for adjusting signal levels of the plurality of signals such that each of the signals levels of the plurality of signals becomes equal to a reference level determined from at least one of the signal levels of plurality of signals" [original emphasis] ... [page 17, para. 1-3; REMARKS].

FIRST : There seems to be problem of semantics here. Rees indeed has an adjusting means, which consist of several units, such as 120,122 etc. All these units *function* as an adjusting means. They indeed adjust the signals. And each of these signals indeed become equal to the reference level that is being generated from combination of these signal to the *extent claimed*.

SECOND: As to reference level being generated from at least one of the signals, Rees definitely discloses that see col. 6, lines 33-52.

B) That: "... Rees doe not discloses or suggest a signal synthesizing apparatus for an optical disc which can easily designed and which has a relatively simple circuit structure" [page 17, Para. 4; REMARKS].

FIRST: These attributes of so called "easy design" and/or "simple structure" are not claimed. Therefore this argument is moot.

SECOND: even if they were claimed it will constitute indefinite language and will create 112 problems, because simple with respect to what question will arise.

C) That: "In, comparison, in the claimed invention, since the reference value is decided on the basis of signal level(s) of the returning light beam segments(s), there is no need to separately or specially prepare a reference value, as in Rees" [page 17, Para. 5; REMARKS].

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This aspect is NOT claimed clearly until claim 2. Since claim 2 may be allowed now, this argument is moot.

D) That: "Somewhat similarly, independent claim 10 recites, ..." [page 18, para. 2; REMARKS].

Similar arguments as to claim 1 are also applicable to claims 10 and 17, see paragraph 10, section A-C above.

As to arguments regarding claim 2-8, 11-15, 18-24 and 26-29; they are moot because new rejection has been given in the light of newly presented amendments to claims 2, 11 and 18.

12. **THIS ACTION IS MADE FINAL.** Applicant's amendment necessitated the new grounds of rejection presented in this office action. Accordingly, **THIS ACTION IS MADE FINAL.** See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Contact information

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gautam R. Patel whose telephone number is (703) 308-7940. The examiner can normally be reached on Monday through Thursday from 7:30 to 6.

The appropriate fax number for the organization (Group 2650) where this application or proceeding is assigned is (703) 872-9314.

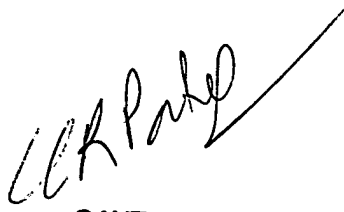
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Doris To can be reached on (703) 305-4827.

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Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is (703) 305-4700 or the group Customer Service section whose telephone number is (703) 306-0377.

Gautam R. Patel
Primary Examiner
Group Art Unit 2655

March 23, 2005



**GAUTAM R. PATEL
PRIMARY EXAMINER**